Having thus described the preferred embodiments, the invention is now claimed to be:

1. A method of releasing resources of a user session operating in a software environment that includes an automatic memory management algorithm, the method comprising:

detecting an impending execution of the automatic memory management algorithm;

responsive to the detecting, accessing an object of the user session;

identifying one or more external resource references of said object;

releasing said one or more external resource references; and

repeating the accessing, identifying, and releasing for each object of the user session.

2. The method as set forth in claim 1, further including:

performing the accessing, identifying, releasing, and repeating as a Listener method belonging to a Java MyListener class in a Java environment; and

registering the Listener method with the user session.

3. The method as set forth in claim 2, wherein the registering includes:

setting a session attribute to correspond to an instance of the Listener method.

4. The method as set forth in claim 2, wherein the detecting includes:

notifying the registered Listener method of the impending expiration of the user

session.

5. The method as set forth in claim 1, wherein the detecting includes:

detecting an impending expiration of the user session.

6. The method as set forth in claim 1, wherein the accessing, identifying, releasing, and repeating is performed prior to the execution of the automatic memory management algorithm.

7. The method as set forth in claim 1, wherein:

the identifying includes identifying a file resource; and

the releasing includes closing said file resource.

8. The method as set forth in claim 1, wherein:

the identifying includes identifying an allocated resource; and

the releasing includes deallocating the allocated resource.

9. The method as set forth in claim 1, wherein the accessing of an object of the user session includes:

obtaining an object identifier corresponding to said object from an object graph; and

retrieving said object using the object identifier.

10. An article of manufacture comprising a program storage medium readable by a computer and embodying one or more instructions executable by the computer to

perform a method for preparing a user session for expiration, the method including:

detecting an impending expiration of the user session;

traversing an object graph corresponding to the user session to locate user session objects;

for each object located in the traversing, identifying allocated resources of the object; and

for each identified allocated resource, deallocating said allocated resource.

11. The article of manufacture as set forth in claim **10**, wherein the identifying includes:

identifying resources selected from a group consisting of file handles, database connections, sockets, and threads.

12. The article of manufacture as set forth in claim **10**, wherein the traversing, locating, identifying, and deallocating is completed prior to execution of a garbage collection algorithm performed preparatory to expiration of the user session.

13. The article of manufacture as set forth in claim **10**, wherein the one or more instructions are encoded as one of:

Java bytecodes,

C# intermediate language (IL) code,

A compiled Java program, and

a compiled C# program.

14. The article of manufacture as set forth in claim **10**, wherein the traversing of the object graph includes:

obtaining an enumeration of user session objects; and

looping through the enumeration of user session objects.

15. A system comprising:

a software program configured to initiate, process, and terminate user sessions;

a resource deallocation module linked to the software program to deallocate allocated external resources of each object of a user session responsive to an impending termination of said user session; and

an automatic memory management module invoked subsequent to the deallocation performed by the resource deallocation module.

16. The system as set forth in claim **15**, further including:

a Java virtual machine implementing the software program, the resource deallocation module, and the automatic memory management module.

17. The system as set forth in claim **15**, wherein the resource deallocation module includes:

a deallocation listener method adapted to deallocate the allocated external resources of each object of said user session responsive to a notification of the impending termination of said user session.

18. The system as set forth in claim 17, wherein the resource deallocation module is linked to the software program by registration of the deallocation listener method with said user session.

19. The system as set forth in claim 17, wherein the resource deallocation module is linked to the software program by an assignment of an attribute of said user session to the deallocation listener method.

20. The system as set forth in claim 15, further including:

an object graph defining an interrelationship between objects of said user session, the resource deallocation module being adapted to access the object graph to identify the objects of the user session.

21. The system as set forth in claim 15, wherein the automatic memory management module is invoked by the software program to process a plurality of user sessions including said user session.

22. The system as set forth in claim 15, wherein the automatic memory management module is invoked by an operating system to process software including said software program that operate under said operating system.

23. The system as set forth in claim 15, wherein the resource deallocation module is integrated with the automatic memory management module as a single unitary memory management unit that executes prior to the termination of said user session.